



Project No: MCC001901030201
Project: Final Remediation Investigation
Client: AFCEE
Location: Site 24 - Vandenberg AFB
Northing: 639961.402

Borehole ID: HGL33(24MW13B)
Date: 11/15/2002
Geologist: M. Jackson
Checked By: D. Smith, R.G.
Ground Surface Elevation(ft msl): 460.14
Eastling: 1768194.838

24-PNW-13
 24-MW-13A

SUBSURFACE PROFILE					SAMPLE			Water Level	Remarks
Depth	Symbol	Description	USCS	Elevation	Recovery %	Blow Counts	PID (ppm)		
2		Fill	Fill	458					
4		Poorly graded sand Moderate reddish brown, moist, soft, 100% medium grained sand							
6					95	7/9/15	0.8		
8									
10				450					
12		Clay Pale yellowish brown, moist, soft, 100% medium grained sand	CL	449	100	8/8/24	0.9		
14			SC						
16		Sandy clay Moderate yellowish brown, soft, moist, 80% clay, 40% sand		445					
18			SP		70	30/38/50	1.0		
20		Poorly graded sand Pale yellowish brown (90%) mottled with light brown (10%), soft, moist, 100% medium grained sand		440					
22		unit becomes saturated at 19.5'	SC		80	19/38/30	0.6		
24				435					
26		Sand with clay Pale yellowish brown (90%) mottled with light brown (10%), saturated to very moist, soft, 85% sand, 15% clay	CL		95	24/18/17	0.8		
28									
30		Clay with silt Pale yellowish brown mottled with dark yellowish orange (15%), stiff, moist, moderate plasticity, 95% clay, 5% silt	ML	430	90	22/38/36	0.6		
32		lense of clayey silt from 29.5' to 30'	SM						
34		lense of sandy silt from 30' to 30.5'	SP						
36					90	15/24/15	0.9		
38		Poorly graded sand Pale yellowish brown, moist, soft, trace gravel (subangular, 5 mm x 3 mm)		422					
40		lense of gravelly sand from 36.5' to 38.5'	SM		90	15/24/25	0.5		

Set temporary well at approximately 19'.

No intermediate zone water encountered.

Drilled By: Layne Christensen

Drill Method: Dual Tube Percussion

Drilling Equipment: AP-1000

Sampling Equipment: CA Mod Split Spoon

HydroGeoLogic, Inc.
 4600 Northgate Blvd., Suite 207
 Sacramento, CA 95834
 (916) 614-8770 FAX (916) 614-8775

Boring Diameter: 10"

Total Depth Drilled: 69.5'

Sheet: 1 of 2



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42		Sand with silt Pale yellowish brown, moist, soft, medium sand, 95% medium grained sand, 5% silt, trace gravel (subrounded, 2 mm x 1 mm), lenses of clayey silt (3 mm thick)	SM	418	90				Angular gravel sized pieces of Monterey formation observed at 50'.
44			ML						
46				415					
48		Clayey silt Pale yellowish brown, moist, slightly stiff, 80% silt, 20% clay	SW		80	19/47/46	1.0		
50									
52		Well graded sand with gravel Pale yellowish brown and with iron oxide staining, moist, interstitial water at gravel contacts, 60% coarse grained sand, 30% gravel (variegated, angular to subrounded)			70	18/50 for 5"	0.9		
54									
56					70	35/50/50	0.9		
58		unit becomes very moist at 50'							
60		at 53' cobble zone encountered (6 mm x 3 mm x 2 mm, subrounded) 60% coarse sand, 25% gravel, 10% silt, 5% cobbles			60	40/50 for 3"	2.2		
62				397					1420 Set deep well at 69.5'. 11/18/02 0725 Collect groundwater sample (HGL33-GW66). Converted boring to deep well 24MW13B. Wells 24MPMW13 and 24MW13A placed adjacent to this boring.
64		Silty clay Greenish gray, moist, plastic, slightly stiff, 60% clay, 40% silt	CL	396					
66			SW	395					
68		Gravelly sand Greenish gray, moist, 60% well graded sand, 30% gravel, 10% cobbles	rock		60	40/50 for 5"	1.7		
70									
72		Mudstone Black, slightly moist to moist, 1 cm bedding, weathered to 69.5'							
74									
76				391					
78									
80									

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